

**WASHINGTON STATE DEPARTMENT OF TRANSPORTATION**  
**December 2003**

**SUPERPAVE FACT SHEET**

Superpave stands for SUperior PERforming asphalt PAVement and is the result of a Strategic Highway Research Program (SHRP) initiative begun in 1988 to improve Hot Mix Asphalt (HMA). Superpave is a new way of specifying, testing and designing asphalt materials and has been in use by the WSDOT since the mid 1990's.

Superpave offers several advantages over the traditional Hveem HMA design process. Benefits include; longer pavement life with less rutting, fatigue cracking, and thermal cracking which results in reduced maintenance costs. The mix design can be tailored to local traffic and environmental conditions. Because of these benefits the WSDOT has decided to transition to the use of superpave beginning in 2004. Local agencies can use nonstatistical acceptance testing.

**How does Superpave compare to the Hveem process?**

<b>Testing Element</b>	<b>Superpave</b>	<b>Hveem</b>
Pavement Design Needed	Yes	Yes
Specifications Based on Traffic	Yes	No
Performance Grade (PG) Asphalt Binder Selection	Yes	Yes/No
Mix Design Required	Yes	Yes
Use of Reference Design	Yes	Yes
Contractor Mix Designs	Yes	No
State Verification of Design	Yes	Yes
Class A, B, E, etc Mix	No	Yes
Superpave 3/8-inch, 1/2-inch, 3/4-inch, 1-inch Mix	Yes	No
Sampling of HMA	Yes	Yes
Gradation Testing	Yes	Yes
Asphalt Content Testing	Yes	Yes
Field Compaction Density Testing	Yes	Yes
Gyratory Percent Voids Testing	<b>Yes*</b>	No
Gyratory Voids in Mineral Aggregate (VMA)	<b>Yes*</b>	No
Flat and Elongated Particles Testing	Yes	No
Fine Aggregate Angularity Testing	Yes	No
Sand Equivalent Testing	Yes	Yes
Fracture Testing	Yes	Yes
PG Asphalt Acceptance Tests	Yes	Yes
<b>* For statistical acceptance testing only.</b>		
Material Cost Increase Experienced	Slight/None	--